

**EXHIBIT 2**  
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**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA**

CIVIL ACTION NO. 3:20-CV-06754

**GOOGLE LLC,  
v.  
SONOS, INC.**

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**SUPPLEMENTAL EXPERT REPORT OF JAMES E. MALACKOWSKI**

December 9, 2022



I reserve the right to update my calculation of accused units sold, revenue, and/or installations, and the resulting calculation of reasonable royalty damages, if additional information is provided.

## 12. EVALUATION OF ROYALTY

The determination of a reasonable royalty, in simple economic terms, involves valuing intangible asset(s) and determining what a user would pay for the use of the assets. There are a number of common ways to value intangible assets in evaluating reasonable royalty damages, including the *Market Approach*, the *Income Approach*, and the *Cost Approach*. My consideration of each of these approaches is discussed below.

### 12.1 The Market Approach

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The Market Approach values assets based on comparable transactions between unrelated parties. As described in the well-known text, Economic Damages in Intellectual Property:

*The market approach references a market with comparable transactions to determine the fair market value of an asset. The degree of reliance on comparable transactions depends on an assessment of the transactions to determine if they are sufficiently similar to provide an indication of the fair market value for the assets in question. Factors to consider include the nature of the assets being transferred, the industry and products involved, agreement terms, and other factors that may affect the agreed-on compensation. The market approach is often helpful in determining the running royalty rates in specific licensing transactions based on similar transactions in the marketplace....Any market approach analysis will likely require reasonable adjustments.*<sup>235</sup>

With the Market Approach, an examination of the terms of similar technology transfers is undertaken and inferences are drawn from those observations to identify terms that the licensor and licensee might have agreed to at the hypothetical negotiation. Accordingly, I have considered the licenses produced in this matter under the Market Approach. I understand that, because of the unique nature of intellectual property and the fact that, in many cases, there are few, if any, market transactions involving the property at issue, “[t]he market approach is typically least effective for...most intangible assets and intellectual property.”<sup>236</sup>

A number of agreements and amendments were produced in this case, which I have reviewed. Although I do not think any of the following agreements and amendments are comparable to the license that would be granted under the hypothetical negotiation, I discuss them below to illustrate Sonos’s preference of a running royalty in some agreements. Sonos’s preference of a running royalty, specifically as a licensor in a competitive environment, was also supported by Mr. Triplett.<sup>237</sup> It is also my opinion that Google prefers lump sum amounts in settlements, cross-licenses, and patent acquisitions transactions, which is different from what would result in the hypothetical negotiation.<sup>238</sup> As I discussed in my deposition, one notable takeaway from

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<sup>235</sup> Slottje, D., “Economic Damages in Intellectual Property,” pp. 291-293.

<sup>236</sup> Smith, G. and Parr, R., “Valuation of Intellectual Property and Intangible Assets,” p. 172.

<sup>237</sup> Deposition of James Malackowski, August 26, 2022, p. 53.

<sup>238</sup> Deposition of James Malackowski, August 26, 2022, p. 168.



the Google/Sonos licensing negotiation was that Sonos does not usually seek to license its intellectual property to third parties.<sup>239</sup> These licensing negotiations also support the running royalty form of payment.<sup>240</sup>

I have provided summaries of certain agreements that I find particularly important to highlight in the following sections.

### 12.1.1 Sonos's Licenses and Agreements

#### 12.1.1.1 Sonos/Legrand License

On December 1, 2020, Sonos and Pass & Seymour, Inc. ("Legrand") entered into the Confidential Patent License Agreement (the "Sonos/Legrand License").<sup>241</sup> As part of this license, both Sonos and Legrand agreed to release provisions which irrevocably released both Sonos and Legrand from any outstanding claims of infringement related to Sonos's Licensed Patents or Covered Products or Legrand's Licensee Patents or Covered Products.<sup>242</sup>

As defined in the license, for Legrand, Covered Products included "all multi-room audio products," which comprised 15 products from the "Nuvo" product line.<sup>243</sup> For Sonos, Covered Products was defined as "all software, products and services of Sonos that are Sold by Sonos during the Term."<sup>244</sup> Licensed Patents was defined as "all utility Patents owned or controlled by Sonos at any time during the Term, but excluding any of the Sonos Patent portfolio related to concurrent voice technology (*i.e.*, patents directed to concurrently operating multiple voice services on a single product, offering, or device)."<sup>245</sup> Licensee Patents were defined as "any utility Patents owned or controlled by Licensee and or its Affiliates at any time during the Term which are related to multi-room wireless audio products and/or smart speakers."<sup>246</sup> The Term of the Sonos/Legrand License began on the Effective Date and would terminate upon September 30, 2024 unless Sonos or Legrand provide notice of early termination.<sup>247</sup>

Sonos granted to Legrand, "effective as of the Effective Date, a personal, nonexclusive, non-transferable (except as specifically provided for in Section 7.8) and non-sublicensable license under the Licensed Patents

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<sup>239</sup> Deposition of James Malackowski, August 26, 2022, pp. 174-175.

<sup>240</sup> Deposition of James Malackowski, August 26, 2022, pp. 174-175.

<sup>241</sup> Pass & Seymour operates as Legrand in the U.S. See "Legrand," *Legrand.US*, <https://www.legrand.us/pass-and-seymour>. SONOS-SVG2-00042905-922 at 905.

<sup>242</sup> SONOS-SVG2-00042905-922 at 907-908.

<sup>243</sup> SONOS-SVG2-00042905-922 at 905-906 and 921.

<sup>244</sup> SONOS-SVG2-00042905-922 at 906. The license notes that Covered Products do not include: 1) Foundry Products; 2) Acquired Products; 3) Stand-Alone Software; or 4) Clone Products.

<sup>245</sup> SONOS-SVG2-00042905-922 at 906.

<sup>246</sup> SONOS-SVG2-00042905-922 at 906.

<sup>247</sup> SONOS-SVG2-00042905-922 at 913.



to Sell Covered Products in the applicable Territories during the Term.”<sup>248</sup> The Territories was defined as worldwide.<sup>249</sup> Legrand covenanted not to sue Sonos for patent infringement under the Licensee Patents.<sup>250</sup>

In return for granting a license, Sonos would receive compensation in the form of an initial fee as well as ongoing royalty payments. The non-refundable initial fee would be equivalent to royalty payments for sales made between January 1, 2019 and September 30, 2020 as consideration for releasing Legrand from any alleged infringement prior to the December 1, 2020.<sup>251</sup> For sales made on October 1, 2020 or later, Legrand would pay a per-unit royalty according to volume tiers and relevant geography, as shown in the figure below.

**Figure 15: Sonos/Legrand License Royalty Structure**<sup>252</sup>

|                 | Annual Units       |                   |                    |                    |                    |                |
|-----------------|--------------------|-------------------|--------------------|--------------------|--------------------|----------------|
|                 | Less than<br>5,000 | 5,001 -<br>10,000 | 10,001 -<br>20,000 | 20,001 -<br>40,000 | 40,001 -<br>80,000 | Over<br>80,000 |
| <b>U.S.</b>     | \$ 12.00           | \$ 15.00          | \$ 19.00           | \$ 24.00           | \$ 30.00           | \$ 30.00       |
| <b>Non-U.S.</b> | \$ 3.60            | \$ 3.60           | \$ 4.50            | \$ 5.70            | \$ 7.20            | \$ 9.00        |

Additionally, for Covered Products below \$100 MSRP, Legrand agreed to pay a flat-rate per-unit royalty of \$6.00 or \$3.00, depending on if a unit was sold within the United States or not, respectively.<sup>253</sup> Legrand would also be subject to a minimum royalty payment of:

- i) \$35,000 for October 1, 2020 to September 30, 2021;
- ii) \$20,000 for October 1, 2021 to September 30, 2022;
- iii) \$7,500 for October 1, 2022 to September 30, 2023; and
- iv) \$2,500 for October 1, 2023 to September 30, 2024.<sup>254</sup>

The Sonos/Legrand License would initially extend through September 30, 2024, subject to either party providing a notice of termination prior to that date.<sup>255</sup> Both parties also agreed to “negotiat[e] in good faith any extension of the Term [and]...any sales made [] beginning on October 1, 2024 through the date an agreement to an Extended term is made and executed [] shall be considered licensed.”<sup>256</sup> On October 15, 2021, Legrand notified Sonos that it had “as of October 13, 2021, initiated an End-of-Life Event for all Covered Products.”<sup>257</sup>

<sup>248</sup> SONOS-SVG2-00042905-922 at 908.

<sup>249</sup> SONOS-SVG2-00042905-922 at 907.

<sup>250</sup> SONOS-SVG2-00042905-922 at 908.

<sup>251</sup> SONOS-SVG2-00042905-922 at 907, 909.

<sup>252</sup> SONOS-SVG2-00042905-922 at 910.

<sup>253</sup> SONOS-SVG2-00042905-922 at 910.

<sup>254</sup> SONOS-SVG2-00042905-922 at 911.

<sup>255</sup> SONOS-SVG2-00042905-922 at 913.

<sup>256</sup> SONOS-SVG2-00042905-922 at 913.

<sup>257</sup> SONOS-SVG2-00054781.



The Sonos/Legrand License is a portfolio-wide license which includes all Sonos “utility Patents owned or controlled by Sonos at any time during the Term but excluding any of the Sonos Patent portfolio related to concurrent voice technology.”<sup>258</sup> Therefore, I understand this license included rights to the Asserted Patents in addition to a multitude of other technologies. From an economic perspective, a license to Sonos’s entire portfolio is not economically comparable to a bare patent license that would result from the hypothetical negotiation. However, the running royalty rate structure is indicative of the royalty form Sonos historically accepted in exchange for a license to its intellectual property. Also, given that the license is for Sonos’s entire portfolio minus concurrent voice technology, the per-unit royalty rates included in the Sonos/Legrand License can be viewed as a maximum ceiling for the value of the Direct Control and Zone Scene technology.

In the hypothetical negotiation, the parties would consider that the technology licensed was broader than the Asserted Patents, in addition to several economic factors. The Sonos/Legrand License included mutual covenants not to sue, which is a right granted above and beyond what would be considered at the hypothetical negotiation. In addition, the Sonos/Legrand License granted worldwide rights while the license resulting from the hypothetical negotiation would be limited to the United States. While I understand that Sonos and Legrand were competitors in the speaker market, Legrand paid approximately \$200,000 in royalties because, according to Legrand, it was getting out of the market.<sup>259</sup>

It is my opinion that there are several economic factors associated with this license which make it unhelpful for determining a royalty rate in the hypothetical negotiation. However, since the license did include a grant to Sonos’s entire portfolio, which I understand included the Asserted Patents, the per-unit royalty rates could represent a maximum as to the value of the royalty rate the parties would agree upon at the hypothetical negotiation.

Mr. Bakewell and I both agree that this agreement is “not comparable to the hypothetical license” that would be granted in this matter.<sup>260</sup> However, Mr. Bakewell also states that this agreement “is not relevant to the hypothetical negotiations, either in terms of form or amount, particularly as a ‘maximum’” because it is wider in scope geographically (*i.e.*, worldwide) and legally (*i.e.*, including release, covenant not to sue, etc.).<sup>261</sup> I disagree with Mr. Bakewell’s characterization – he provides no analysis to support his claims and I understand that, on balance, Sonos’s extensive patent portfolio included in this license would likely outweigh the arguments Mr. Bakewell advances.

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<sup>258</sup> SONOS-SVG2-00042905-922 at 906.

<sup>259</sup> Legrand offers “professional-grade architectural and outdoor speakers.” “Speakers,” *Legrand.com*, <https://www.legrand.us/audio-visual/speakers/c/lgnd011300>. See, SONOS-SVG2-00054769; SONOS-SVG2-00054770; SONOS-SVG2-00054771; SONOS-SVG2-00054772; SONOS-SVG2-00054773; SONOS-SVG2-00054774; SONOS-SVG2-00054775; SONOS-SVG2-00054776-778; SONOS-SVG2-00054779; SONOS-SVG2-00054780; SONOS-SVG2-00054781; SONOS-SVG2-00054782-784; SONOS-SVG2-00054785-788; SONOS-SVG2-00054789-792; and SONOS-SVG2-00054793-796.

<sup>260</sup> Bakewell Rebuttal Report, p. 183.

<sup>261</sup> Bakewell Rebuttal Report, pp. 181-183.



### 12.1.1.2 Sonos/Lenbrook License

On July 28, 2020, Sonos and Lenbrook Industries Limited (“Lenbrook”) entered into a Confidential Patent License Agreement (the “Sonos/Lenbrook License”).<sup>262</sup> Although the Sonos/Lenbrook License is not explicitly entitled as a settlement, both parties agreed to, within three days of execution, “jointly move to dismiss with prejudice all of their claims in the following litigation between the Parties: *Sonos, Inc. v. Lenbrook Industries Limited d/ b/ a Bluesound International et al*, 2-19-cv-05411 (CDCA).”<sup>263</sup> The Sonos/Lenbrook License would remain effective through March 31, 2024, subject to either party’s written notice of early termination.<sup>264</sup> Lenbrook also retained the right to extend the license two times, each for an additional two year period.<sup>265</sup>

Structured as a cross-license, both parties granted the other “a personal, nonexclusive, nontransferable [] and nonsublicensable [] license under the Licensed Patents to Sell Covered Products” worldwide.<sup>266</sup> Specifically, Sonos was licensed to use Lenbrook’s patents in “all software, products and services,” while Lenbrook licensed the use of Sonos’s patents, including “patents in the current litigation between the Parties (USP 8,588,949; 8,868,698; 8,938,312; 9,195,258; 9,219,959; 9,252,721; and 9,883,234) and all patents claiming priority to the foregoing or to any patent or application to which any of the foregoing claim priority” in “all BluOS-enabled multi-room wireless audio products, software or services.”<sup>267</sup> The Sonos/Lenbrook License defined Covered Products for Lenbrook as “all BluOS-enabled multi-room wireless audio products, software, or services that are Sold by Lenbrook, its Subsidiaries, or Partners, during the Term (excluding Acquired Products).”<sup>268</sup>

In exchange for the license granted, Lenbrook agreed to pay Sonos an initial fee as well as a per-unit royalty. The non-refundable initial fee, an amount “equivalent to the 2019 royalties due,” would be paid under the same royalty structure and could not be credited to future royalties.<sup>269</sup> Sonos would not explicitly pay for the license provided by Lenbrook, but was rather compensated “in the form of reduced Royalties and the reduction in the amount of the Initial Fee.”<sup>270</sup> For Covered Products sold January 1, 2020 and later, the tiered royalty structure shown in the figure below would apply:

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<sup>262</sup> SONOS-SVG2-00042923-944 at 923.

<sup>263</sup> SONOS-SVG2-00042923-944 at 936.

<sup>264</sup> SONOS-SVG2-00042923-944 at 931.

<sup>265</sup> SONOS-SVG2-00042923-944 at 932.

<sup>266</sup> SONOS-SVG2-00042923-944 at 923-926.

<sup>267</sup> SONOS-SVG2-00042923-944 at 923-924.

<sup>268</sup> SONOS-SVG2-00042923-944 at 924.

<sup>269</sup> SONOS-SVG2-00042923-944 at 927.

<sup>270</sup> SONOS-SVG2-00042923-944 at 927.

**Figure 16: Sonos/Lenbrook License Royalty Structure**<sup>271</sup>

|                | Annual Units       |                   |                    |                    |                    |                     |                 |
|----------------|--------------------|-------------------|--------------------|--------------------|--------------------|---------------------|-----------------|
|                | Less than<br>5,000 | 5,001 -<br>10,000 | 10,001 -<br>20,000 | 20,001 -<br>40,000 | 40,001 -<br>80,000 | 80,001 -<br>160,000 | Over<br>160,000 |
| <b>U.S.</b>    | \$ 12.00           | \$15.00           | \$19.00            | \$24.00            | \$30.00            | \$30.00             | \$30.00         |
| <b>Non-U.S</b> | \$ 3.60            | \$ 3.60           | \$ 3.60            | \$ 4.50            | \$ 5.70            | \$ 7.20             | \$ 9.00         |

Similar to the Sonos/Legrand License, Lenbrook also agreed to a flat-rate per-unit royalty of \$6.00 or \$3.00 for Covered Products under \$100 MSRP inside or outside the United States, respectively.<sup>272</sup> Lenbrook would also pay a minimum quarterly royalty of \$10,000 throughout the license term as a “pre-payment to be applied towards amounts owed by Lenbrook for Royalties.”<sup>273</sup> Finally, in the event that Sonos agreed to a lower royalty payment structure to a “Similarly Situated Licensee,” with no other additional value received by said licensee, then Lenbrook would be entitled to receive the new, discounted royalty rate.<sup>274</sup>

The technology licensed under the Sonos/Lenbrook License is technically comparable to the Asserted Patents. Specifically, I understand that Sonos licensed to Lenbrook the patents which were at issue in ongoing litigation which broadly relate to multi-room home audio speakers. However, the license provides no way to determine a value specific to Direct Control or Zone Scene technologies. The license is also a license to multiple patents, rather than a bare patent license including only the Asserted Claims.

In the hypothetical negotiation in this case, the parties would consider that the technology licensed was comparable generally. The parties would also consider several economic factors. Specifically:

- i) the Sonos/Lenbrook License was entered as part of the settlement of litigation, in which Lenbrook contested the validity and infringement of Sonos’s patents;<sup>275</sup>
- ii) Lenbrook agreed neither to contest nor assist another in contesting the validity, infringement, or enforceability of the Licensed Patents against any third party;
- iii) the royalty was likely discounted based on the risk of either invalidity or non-infringement judgments of Sonos’s patents;<sup>276</sup>

<sup>271</sup> SONOS-SVG2-00042923-944 at 927-928.

<sup>272</sup> SONOS-SVG2-00042923-944 at 928.

<sup>273</sup> SONOS-SVG2-00042923-944 at 928-929.

<sup>274</sup> SONOS-SVG2-00042923-944 at 929.

<sup>275</sup> Answer, Sonos, Inc. v. Lenbrook Industries Limited and Lenbrook America Corp., Case No. 2:19-CV-05411, October 14, 2019, pp. 50-53.

<sup>276</sup> I note that at the time of the settlement, the underlying litigation was relatively early along. The complaint in the case was filed on June 20, 2019 (Docket No. 1) and the case was dismissed on July 30, 2020 (Docket No. 51), shortly after the Answer to the Complaint was filed as Docket No. 45. Complaint for Patent Infringement, *Sonos, Inc., v. Lenbrook Industries Limited, et al.* (CDCA), C.A. 2:19-cv-05411, p. 1; Order Granting Joint Stipulated Request For Dismissal with Prejudice, *Sonos, Inc., v. Lenbrook Industries Limited, et al.* (CDCA), C.A. 2:19-cv-05411, p. 1; and Lenbrook Industries Limited’s First Answer to Complaint for Patent Infringement, *Sonos, Inc., v. Lenbrook Industries Limited, et al.* (CDCA), C.A. 2:19-cv-05411, p. 1.





- iv) both parties granted licenses to each other similar in nature to a cross-license;<sup>277</sup> and
- v) the license grant was worldwide and included a most-favored nation clause, whereas the hypothetical negotiation would result in a bare license covering the United States.

I understand that Lenbrook has paid Sonos approximately \$1.5 million in royalties under this license.<sup>278</sup>

Mr. Bakewell and I agree that the Sonos/Lenbrook License is not probative of the outcome of the hypothetical negotiation in this case.<sup>279</sup> However, I note that the per-unit royalty structure is indicative of Sonos's past licensing history. Mr. Bakewell disagrees with this opinion, stating that "[t]he royalty rates that Mr. Malackowski discusses associated with this agreement are not relevant to the hypothetical license, nor are any of its other terms," claiming I do not account for the stage of the settlement, the "effective economic lives of patents," or the discount associated with the validity and infringement of Sonos's patents.<sup>280</sup>

Mr. Bakewell misses the mark – I do not use the royalty rate amount, rather only the structure, to inform my opinion. First, Mr. Bakewell's comments regarding the stage of settlement and discount would generally affect the royalty rate only, not the structure. Second, the "effective economic lives of patents" is one of the reasons that Sonos would push for a running royalty at the hypothetical negotiations; it provides a risk-sharing opportunity between the licensee and the licensor as seen in this license and noted by Mr. Bakewell.

#### 12.1.1.3 Sonos/DEI Agreement

On May 17, 2018, Sonos and DEI Sales, Inc. ("DEI" or "Denon") entered into a Confidential Patent Covenant Agreement (the "Sonos/DEI Agreement").<sup>281</sup> Both parties agreed to a worldwide covenant not to sue for patent infringement of the Covered Products, as well as the dismissal of current litigation proceedings in both district court and the Patent Trial and Appeal Board, subject to Denon successfully making all payments contemplated therein.<sup>282</sup>

The Sonos/Denon Agreement would remain in effect until May 17, 2022; however, each of the covenants not to sue with respect to the litigated patents would remain in effect through the expiration of said patents.<sup>283</sup> A summary of the litigated patents between the parties is found in the figure below:

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<sup>277</sup> SONOS-SVG2-00042923-944 at 926.

<sup>278</sup> SONOS-SVG2-00054797-798; SONOS-SVG2-00054799; SONOS-SVG2-00054800-802; SONOS-SVG2-00054803-804; SONOS-SVG2-00054805-807; SONOS-SVG2-00054808-811; and SONOS-SVG2-00054812-814.

<sup>279</sup> Bakewell Rebuttal Report, p. 179.

<sup>280</sup> Bakewell Rebuttal Report, pp. 179-180.

<sup>281</sup> SONOS-SVG2-00059384-404 at 384.

<sup>282</sup> SONOS-SVG2-00059384-404 at 386-388, 394.

<sup>283</sup> SONOS-SVG2-00059384-404 at 389.